

PATENT ABSTRACTS OF JAPAN

(11) Publication number : 05-199917
 (43) Date of publication of application : 10.08.1993

(51) Int. Cl. A46B 7/06
 A46B 13/02
 A61C 17/22

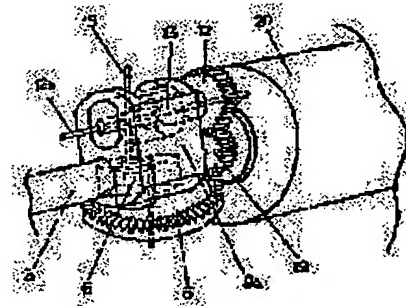
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 (22) Date of filing : 28.01.1992 (72) Inventor : TERUUCHI HIDEO

(54) MOTOR-DRIVEN TOOTHBRUSH

(57) Abstract:

PURPOSE: To execute reverse motion and truncated chevron motion, and to refreshingly brush the boundary line of teeth and the grum, between teeth, and the tooth surface by executing simultaneously the oscillating motion in the axial direction and around the axis, and changing its speed.

CONSTITUTION: A turning speed ratio of a face gear 5 and a face gear 12 is set to 1:2, and the face gear 12 is placed side by side with a pinion 19 and supported axially by a supporting shaft together with an eccentric cam 13. By the simultaneous swinging motion by which the swinging motion is executed in the axial direction by the face gear 5, an eccentric cam 6, and a cam follower shaft 9a, and the swinging motion is executed around the axis by the face gear 12, the eccentric cam 13, and the cam follower shaft 9a, a brush part 4 of a toothbrush 2a executes truncated chevron motion through setting the pinion 19, the face gear 5, and the face gear 12 in a proper way. The number of times of swinging in the axial direction and the number of times of swinging around the axis can be changed, the tooth brush part 4 can execute circular motion, reverse motion, and truncated chevron motion at a high speed along a small distance, dental plaque which is scarcely removed is eliminated and teeth are brushed effectively.



LEGAL STATUS

[Date of request for examination] 01.05.1996
 [Date of sending the examiner's decision of rejection]
 [Kind of final disposal of application]

other than the examiner's decision of
rejection or application converted
registration]

[Date of final disposal for application]

[Patent number] 2804940

[Date of registration] 24. 07. 1998

[Number of appeal against examiner's
decision of rejection]

[Date of requesting appeal against
examiner's decision of rejection]

[Date of extinction of right] 24. 07. 2001

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